Background

The Braille Authority of North America (BANA) voted on November 2, 2012 to adopt Unified English Braille (UEB) as the official braille code of North America. BANA is the organization charged with promoting and facilitating the uses, teaching, and production of braille. BANA is comprised of representatives from 18 different organizations of and for people who are blind and visually impaired, and meets twice a year to promulgate rules, make interpretations, and render opinions and decisions pertaining to all braille codes and their production. In addition to those meetings, technical committee members meet regularly to work on specific tasks in specialty areas relating to braille and tactile materials.

Since the 2012 adoption of UEB, BANA has been working towards implementation of UEB in four phases:

2013: Information year – BANA has developed and disseminated information about UEB and gathered input from constituents.

2014: Infrastructure year – BANA and other organizations planned for procurement and production of braille materials in UEB and developed training materials.

2015: Instructional Year – Readers, producers, and educators will become proficient in UEB.

2016: Implementation Year – All new transcriptions will be produced in UEB; educators will teach the code. Devices and software will fully and accurately incorporate UEB. **UEB is to be the official braille code beginning January 5, 2016.**

In response to the adoption of UEB, the Pennsylvania Department of Education, Bureau of Special Education seeks input from PA stakeholders before the transition plan is finalized.

2015-2016: Year 1 – Planning and Preparation for Implementation and Professional Development

<table>
<thead>
<tr>
<th>Grade</th>
<th>Textbook Implementation</th>
<th>All State and Local Assessments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades K-12</td>
<td>All textbooks are in current braille code:</td>
<td>State and Local assessments will be provided in current braille code: English Braille American Edition (EBAE) and Nemeth Code</td>
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<tr>
<td></td>
<td>• English Braille American Edition (EBAE) and Nemeth Code</td>
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<tr>
<td></td>
<td><strong>Communication:</strong></td>
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<tr>
<td></td>
<td>• Notice to all LEAS on changes</td>
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<tr>
<td></td>
<td>• Public notices on all changes- Webpage PDE and PaTTAN of plan and update.</td>
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<td><strong>Accountability:</strong></td>
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<td></td>
<td>• How to ensure that all persons contracted are using correct code?</td>
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<td></td>
<td>• How to ensure teachers are competent in code changes and have implemented according to the timeline?</td>
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**RATIONALE:** This year is focused on providing the knowledge, skills, and instructional approaches to TVIs regarding the code and formatting changes related to UEB. Transcriptionists need to become UEB proficient by December 31, 2015. This may include securing updated computer software and/or hardware as well as the knowledge and skills to produce UEB.

**Input Requested:** What process should be used to ensure that teachers and transcriptionists have received training in UEB? Should there be a certificate on file?
### 2016-2017: Year 2 – Implementation

#### Grade Textbook Implementation All State and Local Assessments

<table>
<thead>
<tr>
<th>Grades K-3</th>
<th>All content area textbooks in UEB</th>
<th>State and Local assessments in UEB for grade 3</th>
</tr>
</thead>
</table>

**Grades 4-12**

As a result of extensive research surrounding best practice for braille production and to remain consistent with other producers of braille materials, PaTTAN AIM Center will adopt the American Printing House for the Blind’s implementation plan for textbook and braille on demand production. APH’s implementation plan as it relates to PaTTAN AIM Center braille production services are as follows:

- Orders for textbooks in subjects using literary braille (i.e., social studies and language arts), not previously transcribed, will be produced in UEB for the 2016-17 school year.
- Orders for textbooks in technical subjects (i.e., science and mathematics), not previously transcribed, will be produced in UEB and/or UEB with Nemeth Code for the 2016-17 school year.
- Textbooks previously transcribed will be available in their original codes, following APH’s policy of not duplicating previously transcribed textbooks and supplementary materials.
- Math and Science: Nemeth & English Braille American Edition (EBAE) or Nemeth and UEB

**RATIONALE:** for any new textbooks being produced in braille for the August 2016 school year start will be produced in UEB for all students K-3. Nemeth will continue to be produced for older students.

**Input Requested:** This is a transitional year, which needs to consider individual student readiness to access both the state practice and grade-level exams in the code format utilized by the individual student. State Assessment will need to be provided in same format as instruction. Should the state move to all UEB except for the high school student?

### 2017-2018: Year 3 – Implementation

#### Grade Textbook Implementation All State and Local Assessments

<table>
<thead>
<tr>
<th>Grades K-7</th>
<th>ELA and Social Sciences textbooks in UEB Math and Science: UEB and Nemeth Or UEB</th>
<th>Grades 3, 4, 5, 6, 7: ELA Exam: UEB only Math Exam: UEB and Nemeth, or UEB only Science Exam: UEB and Nemeth, or UEB only</th>
</tr>
</thead>
</table>
Grades 8-12 | ELA and Social Sciences: UEB  
Math and Science: UEB and Nemeth Or UEB | Match textbook options for grades 8 and 11  
- ELA Exam: UEB only  
- Math Exam: UEB and Nemeth, or UEB only  
- Science Exam: UEB and Nemeth, or UEB only

**Input Requested:** For students in grades K-7, the provision of UEB only is preferred for math and science content areas. At what point does PA discontinue producing UEB and Nemeth, combined, in technical content areas? What should be the phase out schedule?

### 2018-2019: Year 4 – Implementation

<table>
<thead>
<tr>
<th>Grade</th>
<th>Textbook Implementation</th>
<th>All State and Local Assessments</th>
</tr>
</thead>
</table>
| Grades K-12 | All content area textbooks in UEB | - ELA Exam: UEB  
- Math Exam: UEB and Nemeth, or UEB  
- Science Exam: UEB and Nemeth, or UEB  

PSSA: ELA and Math Grades 3-8:  
Science: 4 and 8th grades  
PASA: ELA and Math 3-8  
Science: grades 4, 8, and 11  
Keystone: Literature, Biology, and Algebra 1 for grade 9

**Input Requested:** Will PA completely phase out Nemeth Code to only provide textbooks in UEB for all content areas?

### 2019-2020: Year 5 Full Implementation

<table>
<thead>
<tr>
<th>Grade</th>
<th>Textbook Implementation</th>
<th>All State and Local Assessments</th>
</tr>
</thead>
</table>
| Grade K-12 | All content area textbooks in UEB | - ELA Exam: UEB  
- Math Exam: UEB  
- Science Exam UEB

### Input Requested:
For students in grades K-7, the provision of UEB only is preferred for math and science content areas. At what point does PA discontinue producing UEB and Nemeth, combined, in technical content areas? What should be the phase out schedule?
Training Opportunities

UEB training opportunities for vision professionals as posted to the BANA website:
http://www.brailleauthority.org/ueb.html

- **NLS Braille Transcriber Course** – For information about the National Library Service for the Blind and Physically Handicapped (NLS) braille transcriber course: https://nfb.org/braille-transcribing
- **Introduction to Unified English Braille**: Wisconsin Center for the Blind and Visually Impaired –
http://www.wcbvi.k12.wi.us/outreach/ueb-introduction
- **CNIB Transcriber’s UEB Course** – File types: Word, print PDF, BRF, and DXB.
http://www.cnib.ca/en/living/braille/Pages/Transcribers-UEB-Course.aspx
- **The Hadley School for the Blind UEB Courses**; For information on Hadley UEB courses, visit http://hadley.edu/UEBTransition.asp
- **New Zealand UEB Manual** – NZ UEB manual pdf tutorial
- **UEB Online** – New online UEB course from the RIDBC in Sydney, designed for sighted reader

TVI Training Plan

- **Penn-Del AER Concurrent Session**, April 22-24, 2015
  Session Title: *Making the Move – Strategies and Recourses for the Smooth Transition to UEB.* 70 minute informational session on the UEB adoption and use of braille code changes from instruction to textbooks presented by Mary Nelle McLennan, Vice-Chair BANA, and Dr. Frances Mary D’Andrea, Chair BANA

- **Low Incidence Institute 2015**, Hershey Lodge, August 12 and 13, 2015, 8:45-4:15
  Frances Mary D’Andrea, Ph.D., Past-Chair of the Braille Authority of North America, will present a two-day workshop titled: *Unified English Braille: Training, Updates and Implementation – A Hands-on Experience* at this summer’s Low Incidence Institute. This workshop will be available to all VI professionals including but not limited to: TVIs, paraprofessionals, transcribers, and consumers. The focus of this presentation will be on the changes between UEB and the current code. Participants will have the opportunity for hands-on practice of UEB examples with discussion to follow. Example documents transcribed in UEB will be reviewed. Lastly, participants will engage in a discussion regarding the Pennsylvania proposed state implementation plan.

- Continued state-wide regional trainings to be offered in the UEB. Trainings will focus on both UEB rules and braille instructional strategies for transitioning students. All trainings will be listed on the PaTTAN website at www.pattan.net
  - TVIs must begin teaching the UEB to new braille users. This includes the preschool through third grade students as well as newly diagnosed individuals.
  - TVIs with older students can begin to offer instruction in the UEB with materials in both codes.
  - Provide ongoing updates to vision professionals and their supervisors on the PA UEB Implementation Plan.
  - Materials produced by the PaTTAN AIM Center will be in UEB format for the 2016-2017 school year, following the PA UEB Implementation Plan.